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## SECTION 2

### GENERAL COURT DESIGN ISSUES

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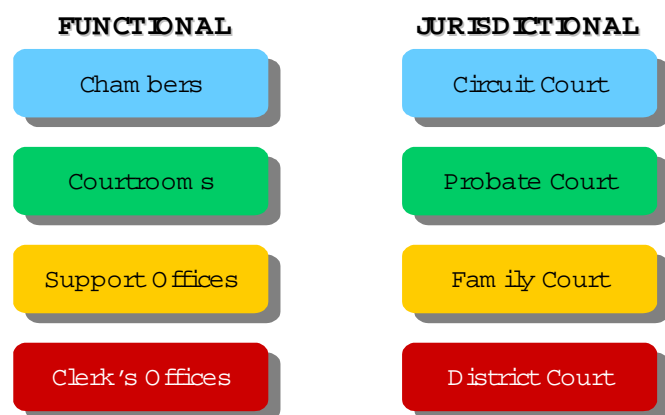
## 2.1 ISSUES OF COURT ORGANIZATION AND ADMINISTRATION

The number and type of courtrooms, their location, and their relationship with other functional elements within the court directly impact facility requirements. Organizational and administrative issues; such as court jurisdiction, case management policies, and case scheduling philosophies; also influence facility requirements.

### 2.1.1 Function vs. Jurisdiction

There are several types of courts within the Michigan court system, including circuit, probate, district, and municipal. The transfer of juvenile jurisdiction from the probate court to circuit court has also resulted in the creation of a family division in all counties. Traditionally, courthouses have been organized along jurisdictional lines. For example, district court and all its support functions would be located in one area or even a separate facility, while circuit court and its support operations would be in another area. The same would be true for probate court. This has the advantage that all of the case processing and case management functions of a particular court are closely associated with convenient access to clerks, judges, courtrooms, and other immediate support offices. The disadvantage has been that there is little ability to share common support spaces and functions, and it is difficult to adapt to changes in court jurisdictions such as occurred with the movement of juvenile matters from the probate court to circuit court. It also fosters specialization in space design with specialized courtrooms for each court and reduces the ability of courts to share resources.

Figure 2-1  
Methods of Building Organization



Another way of organizing a facility is by function. Spaces in the courthouse are arranged according to the work and activities that are performed. For example, clerks in all three courts basically perform the same operations by waiting on the public, creating case files, updating case records, filing case records, and receiving money payments. The only difference is in the type of cases they handle. Organizing the facility along functional lines locates all clerical operations in one area and all courtrooms in another area (with chambers). The advantage is that offices with similar, or the same, facility requirements are located together. This means that the existing space can be more efficiently used and that future organizational or jurisdictional changes can be more easily accommodated. In smaller offices, it means that staff from one court can back up staff from another court when the need arises.

Similar decisions may apply to individual offices. For example, clerk's offices, particularly larger ones, are traditionally organized by case type with separate divisions to handle criminal, civil, or juvenile cases. In large offices, there may be separate public counters for each case type and separate case processing staff. In smaller offices, typically found in rural counties, there is more cross training of staff and fewer case type distinctions may be made.

A trend in some areas of the country is toward providing greater customer service by creating a single point of contact for the public with the creation of customer service centers. That is, one location that can take care of case filing, provide case information, and receive fine or fee payments for a wide range of functions.



Clerks are cross-trained to initiate a criminal complaint, file a civil action, or even accept payments. Implementation of automated case management and financial management systems even permits the creation of customer service centers at remote locations outside the courthouse.

### **2.1.2 Judicial Assignments and Calendaring Systems**

The type of calendaring or scheduling system affects the way in which case files are handled which traditionally has had implications for courtroom sizes, building adjacencies, and office layout. There are basically two ways in which courts assign cases to judges: individual calendars and master calendars. Between these two poles exist a number of hybrid systems. In the individual calendar, cases are assigned to a judge at the time of filing, usually in rotation or by some random method. The judges then manage their own caseload and are responsible for the case until its disposition. In this type of system case-scheduling activities are handled by the judge's staff.

Under a master calendar system, as cases are filed they are placed into a common pool to await further action and assignment. In this system, frequently judges rotate among duties. As motions are filed in a case, the judge currently serving as the motions judge receives the case; at the conclusion of the motion hearing, the case is reassigned to the pool to await the next action. On the trial date, the case is assigned to the next available judge. In this way the same case may pass through the hands of several judges before its disposition.

In an individual calendar, the judicial secretary does the scheduling of cases, and the case files may reside in the judge's offices until the case is disposed. In courts that use a master calendar, there may be a central scheduling office, and the case file will circulate between different judges and the clerk's office. These differences affect file storage, as well as adjacency requirements in both the judges' offices and the clerk's office.

In courts who use an individual calendar, judges typically sit in one courtroom and hear a mix of all case types. This requires that all courtrooms be capable of handling any given case type from civil non-jury cases to criminal jury trials. It is more typical of judges to sit in a division, either permanently or by rotation, in master calendar courts. In this case, it is possible for courtrooms to be specialized for a particular case type, and courthouses may have a mix of jury and non-jury courts and even criminal and civil courtrooms. One difficulty for planning, however, is that courts may switch from one calendaring method to another over a period of years creating problems for facility planners and designers.

### **2.1.3 Court Divisions and Jurisdiction Specialization**

In smaller courts, it is common for each judge to hear all types of cases (civil and criminal). As courts become larger, they often begin to organize themselves into divisions by case type, such as civil, criminal, juvenile, domestic relations, and traffic. In some instances judges may be permanently assigned to one division while in other courts judges may rotate through different divisions according to a schedule.

In courts where judges sit in divisions and rotate duties, courtrooms must be designed to accommodate all types of cases, including civil, criminal, jury, and non-jury. If judges are not assigned their own courtrooms, then more specialized courtrooms may be designed to fit the type of case to be heard. Judges may then move from courtroom to courtroom depending upon the division in which they are presently assigned.



### 2.1.4 Ratio of Courtrooms to Judges

One courtroom per judge is the norm. This has been the traditional pattern in most courthouses. Some courts have adopted a ratio of one courtroom per judge until the court reaches about ten judges; above that number, the court may need only three courtrooms for every four judges. This can occur only where the practice is to share courtrooms and where judges' chambers are separated from the courtrooms so that sharing courtrooms is practical.



Orange County Justice Center, Florida / HLM Architects

One drawback with this approach is that the court has little room for expansion. Another drawback is that many courts use retired and visiting judges to help address their caseload or to fill in for absent judges. Unless there are sufficient courtrooms for these judges to use, the court will not be able to take full advantage of their presence.

One approach is to have alternative types of hearing spaces, such as conference or hearing rooms, available. Many hearings and judicial activities do not require a full-sized courtroom and may just as easily be performed in a conference room.

One strategy for extending the useful life of the courthouse is to begin with at least one courtroom per judge, then design the facility to handle more judges than courtrooms in the future by including spaces that can be converted to chambers. In this way, a building that may have lasted only 15 years before needing an addition, may last 20-25 years depending upon growth. (See Section 2.7 on Growth Management for other expansion strategies.)

Finally, if courtroom sharing is to work, all courtrooms should be identical in their capabilities. All should be capable of holding a criminal jury trial. If some courtrooms lack jury boxes or holding cells, then the court is limited in the types of trials or hearings that can be held in a particular courtroom and loses the benefits of being able to share courtrooms.

### 2.1.5 Specialized Courtrooms

In some situations, it is not necessary that all courtrooms in a large multi-judge court be the same size and design. Courtroom design may be based on the specific requirements of the types of hearings and trials to be held in that courtroom (i.e., criminal, juvenile, or small claims). While there has been a general trend during the past two decades toward smaller and more-specialized courtrooms and hearing rooms, the disadvantage is that these courtrooms cannot adapt to growth or changes in the court's caseload. Where possible, it may be advisable for courts to design all courtrooms to be identical and capable of holding a criminal jury trial. An exception may be the inclusion of at least one large ceremonial courtroom that is also capable of handling a multi-defendant trial.



Orange County Justice Center, Florida / HLM Architects



Another trend has been the use of smaller hearing rooms, suitable for arbitration and mediation. As the use of these methods of dispute resolution increases, many more court facilities will need to include such spaces. Also, circuit courts often make use of referees, and district courts on occasion use magistrates, whose needs are usually met by the addition of smaller, non-jury hearing rooms.

## **2.2 RENOVATION OR NEW COURTHOUSE?**

Most public buildings, including courthouses, usually go through at least one renovation or extensive remodel during its life. At some point in the life of nearly every courthouse comes a point when it must be decided whether it is better to build a new facility or to renovate one more time. The project may involve the addition of new space either for a new courtroom or support functions, retrofitting existing space for courtrooms, and upgrading building systems. Even when there is a planned addition to the building, renovation of the existing facility is often necessary. When this occurs, it is essential that planning attempts to make the new and the old work together so that the smooth flow of people and work processes are not interrupted. This may mean that the entire building (new and old) needs to be entirely reorganized in order to achieve the proper circulation flows, zoning separations, and work adjacencies.

### **2.2.1 When to Renovate and When to Build New**

The decision of when to renovate and when to build a new facility requires consideration of the following:

- The historical or architectural values of the building to be preserved
- The physical integrity of the existing facilities
- Use of the facility by other offices or functions
- Adherence to local building codes
- Life cycle costs
- Functionality
- Growth of the courts and the building's continued potential for expansion
- Ability to comply with accepted court design standards
- Security and prisoner custody requirements
- Accessibility requirements
- Impact on other departments and functions housed in the facility

Of critical importance to the courts is whether the existing facility can meet court design guidelines and standards even when renovated. While some compromises can and need to be expected, fundamental issues of public safety, prisoner access and security, and functionality for court operations should not be compromised.



### **2.2.2 Problems Usually Encountered**

The renovation, or retrofit, of an existing facility for courts (courtrooms, chambers, and clerks' offices) typically presents a number of problems and frequently requires compromises to be made. Among the problems that are likely to be encountered are:

- Spaces too small to accommodate properly sized courtrooms or other functional spaces
- Low floor to ceiling heights for courtrooms
- Inability to achieve proper adjacencies, such as between courtrooms and jury deliberation rooms
- No logical place to connect an addition to the building
- Inadequate electrical, plumbing, and HVAC systems, requiring extensive upgrades
- Hidden problems such as asbestos
- Need to make renovated spaces handicapped accessible
- Need to provide temporary space during construction
- Difficulty in providing proper security in the building

While all of the above present problems that need to be overcome in any renovation project, probably the most critical issues are those related to finding adequate spaces in which to build properly sized and designed courtrooms, the need for proper adjacencies, and the need to provide a minimum level of security and safety within the building. Too often renovation or retrofit projects result in courtrooms that are too narrow, lack the proper floor to ceiling heights, lack safe prisoner access, lack adequate litigation space, and lack necessary public waiting and attorney conference areas.

Among the questions that must be asked early in any project that contemplates the reuse of existing facilities or locating courts in a facility other than a courthouse are:

- Are there spaces large enough and suitable for courtrooms?
- Where will prisoners enter the building and can they reach the courtrooms without having to be escorted through public or private corridors and work areas?
- Can the facility accommodate three circulation systems (public, private, and prisoner) and zones?
- Can the building be made secure?
- Are the main building systems (electrical, plumbing, HVAC) sound?



### **2.2.3 Types of Facilities**

While it is most common for renovation projects to involve the courthouse, it is not uncommon for consideration to be given to retrofitting other types of facilities for court use. The most common type of facility are general office buildings, but schools, hospitals, shopping centers, post offices, and department stores have been known to be used as courthouses.

As a general rule, it is nearly always easier and less expensive to renovate court spaces for general office functions than to renovate general office space for courts. The reuse of general office space, whether built for government or business, is not suitable for many court operations. Courts require three separate zones of circulation (private, public, and prisoner) and most general office buildings do not have adequate vertical circulation system (elevators) and the proper floor plates to accommodate three zones efficiently.

Secondly, the floor to ceiling heights in most general office buildings is too low to properly accommodate courtrooms that should have a minimum of 14 feet from floor to ceiling. While general office space may not be appropriate for courtroom and chambers, it is perfectly acceptable for many court support functions, or ancillary offices, such as the prosecuting attorney, public defender, and probation. These may either remain in a county or city administration building or be located in other general office spaces that has been renovated for their use, as long as it remains close to the courthouse.

It also is important to think of the image that this will present to the community and how it will affect attitudes of litigants. Will the building project a sense of decorum and dignity that is essential to all court facilities?

Shopping centers have an advantage in that there is generally plenty of parking, a commodity that is all too often lacking in many downtown courthouses. Further, many shopping centers are built with high ceilings and fairly large spaces between support columns, permitting great flexibility in locating courtrooms. While it may not be considered appropriate for general jurisdiction trial courts, shopping center locations may be very functional for limited jurisdiction courts that handle high volume functions such as traffic and misdemeanor cases.

### **2.2.4 Phasing of the Project**

A major problem with nearly any renovation projects is the need to phase the work so that the courts may continue to operate during construction. It is necessary to find temporary quarters for the courts to occupy while the existing space is being worked on. This can add extra costs and time to the project if it is necessary to lease temporary space. Where there is also some new construction, for example an addition along with renovation, the new facilities can serve as the temporary location for courts while space in the existing facility is being renovated.

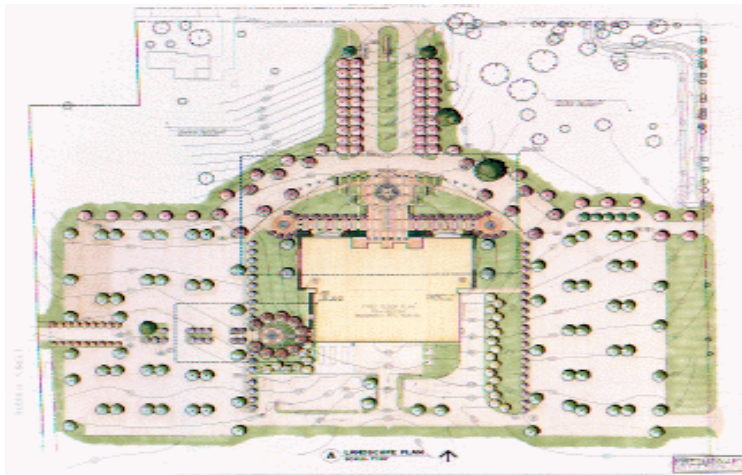
Other situations may involve the demolition of part or all of the existing facility and construction of a new building on the same site. This is particularly difficult, as it almost requires construction of two facilities: a temporary one to be occupied during construction and the permanent facility. What it may mean is that the project must be completed in two parts. All this is terribly disruptive to court operations and the noise and confusion make it extremely difficult to conduct trials while construction work is continuing.



## 2.3 SITE LOCATION

The site chosen for a new courthouse should take into account the size of the building to be built (footprint and height), the types of service to be provided, and the number of people who will use the courthouse. The site will need to accommodate the courthouse itself, and in many cases, will also provide the parking area for staff and visitors to the courthouse.

### 2.3.1 Site Size



Denton County Site Rendering, Texas / Phillips Swager Associates

The footprint size of a courthouse must be large enough to house at least one court set<sup>1</sup> per floor. Ideally, between two and four court sets should be located on each floor. The sizes of these court sets may vary depending on the type of courtroom and the activity that will take place, with the maximum standard size at 6,500 SF and the minimum size at 3,300 SF. Based on these court set sizes, the minimum functional footprint size for a courthouse is approximately 10,000 SF (assuming two court sets per floor). The recommended footprint size is 15,000 to 20,000 SF, which permits like court sets to be paired on each floor.

The height of the courthouse will depend on the footprint size, the number of courtrooms to be built, and the amount of additional staff to be housed in the courthouse. The site for a new courthouse should be selected so that the height of the new building will blend with the contours of the surroundings. In a setting consisting of three to five-story buildings, for example, a 100,000 SF courthouse with a 10,000 SF footprint will tower ten stories high. A larger site capable of handling a building with a 20,000 SF footprint will lower the building height to five stories, which may blend with the surrounding buildings in a more aesthetic manner.

Sufficient parking should be considered when selecting a site. In an urban setting, public parking may be provided nearby in public ramps or garages. If not, the courthouse may provide public parking on site, either in open lots or in parking structures adjacent to the building. It is highly recommended that staff parking be separate from public parking. For security reasons, no public parking should be provided within or under the courthouse. Secure parking should be provided for all judges in an area with a secure entrance to a corridor in the courthouse dedicated to staff only. When judicial access is monitored and controlled, parking may be located in an underground structure in the courthouse.



Orange County Justice Center, Florida / HLM Architects

<sup>1</sup> Court sets within the courthouse comprise functional units of spaces directly related to the courtroom, such as the judge's chamber, the courtroom, attorney conference rooms, witness waiting rooms, jury deliberation rooms, and prisoner holding areas.



The courthouse should have a dignified appearance befitting its function and role as the image of justice in the community. This appearance includes an appropriate introduction to the building through the use of landscaped green space or other proper approach. Site selection should take into account the facade of the building to be built and should provide for a proper approach on the grounds of the future courthouse to balance the style of the building. Site selection, building orientation, and landscaping all have an affect on building security.

The size of the site available and the permitted building height may be governed by zoning laws or setbacks. Careful research of all prospective sites should be done prior to final site selection to determine whether any special evaluations(land use, historical value, wetlands, or other special condition) need to be made prior to construction. Such studies can delay or even prohibit construction on protected land.

Care should be taken to avoid sites of former landfills, toxic waste repositories, or other environmentally hazardous sites, which may have undesirable long-term effects on those who will work in the courthouse on a daily basis.

The courthouse interacts on a daily basis with incarcerated defendants from the jail and with the public. For efficient operations, the courthouse site should be located in a location convenient to the public and to the jail. (If video technology is used to minimize inmate transport to the court, proximity to the jail becomes less important in selecting a courthouse site.) The site must permit secure access for detained offenders through a vehicular sally port that will not be entered by the public or the judiciary.

## 2.4 IMAGE OF THE COURT



Denton County Courts Building / Phillips Swager Associates

In the First International Conference on Courthouse Design, held in 1992, a courthouse was described as both a “temple of justice” and a “legal emporium.” On reflection, anyone who has visited a county courthouse must have been, if even fleetingly, reminded that this structure that epitomizes many of the Constitutional guarantees for all citizens combines the reverence associated with a place of worship in the courtroom and the bartering associated with a market. The average citizen is a participant in the courtroom infrequently and then most probably as a juror. However, the responsibility assigned to a juror is one of the foundations of a democratic society and the environment within which this duty is executed influences the bond between the citizen and the government. Poorly conceived and maintained courtroom environments diminish the respect that is intended for all participants in the process of seeking justice.

Most citizens encounter the courthouse as a “legal emporium” where information is exchanged in a highly interactive environment and in a variety of spaces. While dignity, reverence, and discipline are desirable characteristics for all of the functions of the judiciary, the exchange of information requires a significantly different environment than the administration of justice. The interaction should be efficient, individualized, and accurate, taking place at public counters, private offices, and jury assembly spaces.



Recognizing that courthouse architecture is largely about achieving the balance between the two major functional roles within the environmental context of the surroundings, the image of the building is a statement of the value a community attaches to the administration and management of justice. The role of architecture is to reflect that value through the arrangement and design of the spaces. William Lacy, FAIA – the past president of The Cooper Union in New York and The American Academy of Rome stated; “Courthouses - like churches, synagogues, and hospitals – test the full measure of architects’ talents to deal with people in states of extreme vulnerability. They require the making of spaces that are symbolic, that stretch back through time and attempt – with a sense of stability and durability – to reassure troubled minds and to raise the ideal of a world that aspires to a higher order of meaning and beauty”.

In the design of the courthouse, “image,” as the popular advertisement states, “is everything.” From an image perspective, the community continues to separate the courthouse from most other building types as a unique and important statement about the importance of governing in a fair and just manner. The design of the courthouse needs to reflect the separate and constitutionally independent status of the judiciary as a separate and equal branch of government. Even when located within a larger county government center the image of the courts as separate and equal need to be maintained. The temptation to cheapen the significance of the courthouse by treating the courts as just another “county department” needs to be avoided. Furthermore, the tendency to select lower first cost materials and construction techniques should be assessed in light of a 50-or more-year life.



Solano County Courthouse, California / HOK

The design solution has the responsibility to:



Robert A. Christensen Justice Center, Douglas County, Colorado / HOK

- Create a community symbol of impartial and equal justice for all
- Relate to the surrounding building context, but project the unique function
- Operate efficiently for a diverse user group
- Project a sense of accessibility, durability, and security

How well the Architect achieves these and other requirements is largely dependant upon the guidance provided by the Owner and the User Group. The better articulated the vision of the stakeholders, the greater the potential for a functionally and aesthetically successful courthouse.



### **2.4.1 Accessibility**

The courthouse exists to serve the public and must be easily accessible to those who require its services. Both inside and out, the courthouse must be designed to handle large numbers of visitors. These will include those coming to trial, the media, staff working in the building, witnesses and attorneys associated with cases, citizens coming for information or to file complaints, and those coming to pay fines or other payments. Ample public areas must be provided both inside and outside the building to make access as easy and comfortable

as possible and to maximize the speed at which the public can be served. Because the courts are a government agency, service should be expedient and simple to combat the stereotype of bureaucracy. Accessibility should be designed with public service as the primary goal. This concern extends to the public spaces devoted to security and weapons screening. Sufficient space needs to be provided to permit easy and quick access to the building.

### **2.4.2 Parking**

Ample parking must be provided within easy walking distance of the courthouse for judges, staff, jury members, law enforcement officers, and visitors. In an urban setting, public parking may be provided nearby in public ramps or garages. If not, the courthouse may provide public parking on site, either in open lots or in parking structures adjacent to the building. If the courthouse is collocated with a jail or detention center, the demand for parking is greatly increased due to jail shift changes and visitors.

For security reasons, no public parking should be provided within or under the courthouse. If possible, public parking should be free and near the courthouse. An estimate of the number of parking spaces needed should be completed with the building program or needs assessment. This estimate will include those coming to court, those coming to pick up information, and those requiring any other services housed in the same building. Generally for public and judicial staff parking, there should be one space for every four (4) seats in each courtroom, and one space for every 250 square feet of office space (some jurisdictions have different square footage requirements or recommendations).

If jury trials are held in the courthouse, additional parking spaces (up to 50 per jury called) will be required on days when juries are called. Sufficient parking should be available to permit jurors to park and access the courthouse quickly and easily. To ensure sufficient public parking for jurors, a “juror only” area can be created in a large parking lot, or special parking permits can be handed out to permit jurors to park in unassigned staff spaces. If jurors are required to park in a parking structure, parking fees should be validated by the Courts.

A separate secure parking area should be provided for judges. This parking area should be covered and screened by a wall or fence, if possible. Security cameras should be used to monitor activity in this area. A protected entrance with punch-code or card access should provide limited entry to the courthouse. Courthouse security staff should be located close to this entrance, either inside or outside the courthouse. This parking area can also be used by the bailiffs for an additional security presence. If possible, separate staff parking should also be provided. This parking area can be located close to a secure building entrance for staff, or staff could share the judges’ entrance.

All parking areas should offer ramped walkways to the courthouse for wheelchair or handicapped access. Outside public entrance doors should be equipped with automatic opening devices. Handicapped parking spaces for the public and judicial staff should be provided as near an accessible entrance to the courthouse as possible.

If parking is at a premium, cooperative agreements with churches, schools, stadiums, and other public and/or private institutions should be explored. These agreements should be made during the pre-planning



stage to ensure adequate parking is available. Changes in court scheduling could also alleviate parking demand if high-traffic court sessions can be scheduled at various times during the day or week.

### **2.4.3 Vehicular Traffic**

Traffic flow around the courthouse should be limited. Public vehicles should not be permitted in secure (staff or judge) parking areas or in the proximity of secure staff entrances to the building. Flow can be controlled by having separate vehicular entrances to the courthouse property in a suburban setting or by fencing off parts of the property in an urban setting. Traffic flow should not take public vehicles along a path directly next to the courthouse building—a grassy barrier can prevent this in suburban settings and adjacent buildings or steps can serve the same purpose in an urban setting. Thought should be given to the accessibility of public transportation. This is not only a consideration during site selection, but the flow of public transportation to and around the site need to studies as part of a larger traffic study.

A drop-off circle approach for vehicles can be designed at the main entrance of the building for handicapped access. This entrance should be visible to security staff, either directly or through cameras. No parking should be permitted in this lane.

### **2.4.4 Exterior Lighting**

Most Michigan Courthouses will be served through surface parking lots and some in larger urban areas with a combination of surface and structured parking. In both instances, appropriate levels of exterior lighting will be necessary primarily for security and safety and secondarily for aesthetic reasons.

Lighting levels are measured in lumens or foot-candles. The required lighting level site fixtures will depend upon ambient conditions and surrounding land uses. For planning purposes, a range of 1.0 to 3.0 foot-candles is generally acceptable in most conditions.

### **2.4.5 Building Circulation and Zoning**

The courthouse is a busy center of local government and it needs to operate safely and efficiently. Circulation should be simple and direct. Users and visitors should be able to find their way easily and quickly throughout the courthouse. This is not only a matter of convenience to the public but one of safety for all users of the facility.

Easy pedestrian access should be provided to the main entrance of the courthouse. Proper signs, crosswalks, and sidewalks can be used to guide visitors to the entrance, and to reduce congregation outside the building. Once inside, signs should clearly direct visitors to the various agencies and departments located within the building. Public restrooms should be located inside the security screening at the entrance to the building to reduce multiple checks of the same visitors.



Denton County Courts Buildings / Phillips Swager Associates



If the building is a high or mid-rise, access to higher floors should be provided by elevators. Elevator lobbies should be reasonably sized to accommodate the anticipated number of visitors at peak times. If common waiting areas are provided on each floor, public restrooms and water fountains should be located adjacent to these waiting areas. In larger facilities where high volume activities may be located on several lower floors, consideration should be given to the installation of escalators on the lower floors.

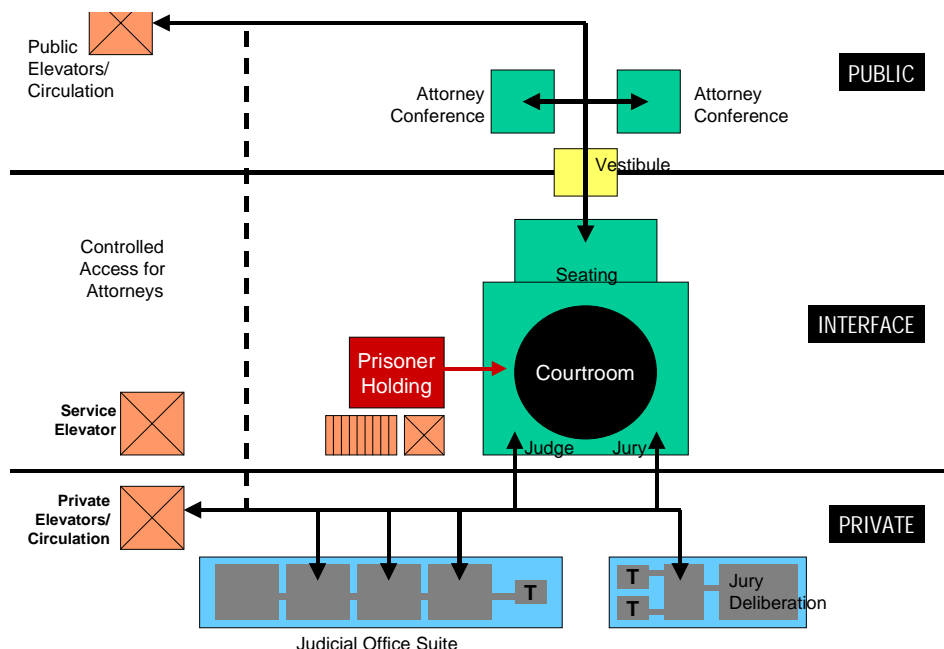
Separate and distinct circulation paths for the public, judges and staff, and in-custody defendants (adult and juvenile) help to achieve the efficient and safe movement of people throughout the building, and are an essential feature of modern courthouses. To accommodate the needed circulation patterns, the courthouse should be organized into areas that are similar in function, operational needs, physical characteristics, and access requirements. There are five distinct zones that should be present in all courthouses.<sup>2</sup>

#### 2.4.6 Public Zone

The public circulation provides access from main building entrances to the various public and functional areas of the building, including all areas of the building used by the general public, attorneys, clients, witnesses, and jurors (before selection). Examples of the areas are: main lobby, corridors, public elevators, public rest rooms, waiting areas, clerk counters, and reception areas. It also includes access to the many court and ancillary offices, such as probation, the public defender, the friend of court, and prosecutor.

Figure 2-2 displays a typical court floor arrangement with public, private, secure, and interface zones.

Figure 2-2  
Typical Court Floor Arrangement

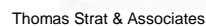


Prepared by HOK for "The Courthouse: A Planning and Design Guide for Court Facilities" and used by permission of the National Center for State Courts

<sup>2</sup> The following discussion on courthouse zoning is taken from *The Courthouse: A Planning and Design Guide for Court Facilities*, published by the National Center for State Courts and is used with their permission.



Figure 2-3  
Circulation Floor Plan



Secure circulation provides movement of in-custody defendants, both adult and juvenile. In-custody defendants should enter the courthouse through a secure vehicular sally port (or secure walkway from the jail or lockup), be taken to a secure central holding and staging area, and from there be escorted to individual courtroom holding cells as needed. The location of prisoner holding cells immediately adjacent to the courtrooms reduces the time needed to produce prisoners in court by allowing prisoners to be housed close to courtrooms. It also allows deputy sheriffs to quickly remove and isolate an unruly prisoner.



Prisoners should be transported to the courtrooms by means of a dedicated secure prisoner elevator. The most practical and efficient arrangement is for the secure prisoner elevator to service holding units located between two courtrooms.

#### **2.4.9 Interface Zone**

This zone includes spaces, such as the courtrooms, where the public, private, and secure zones interact. The public should be able to access these areas directly from the building's main public circulation system. Staff and judges should access these areas by their private and secure circulation. If in-custody defendants are required to be present they should enter by means of the building's secure prisoner circulation.

#### **2.4.10 Service Zone**

Included are all those spaces that serve as support areas for the courthouse, such as the receiving and loading dock or service entrance, storage areas, mechanical spaces, and building maintenance areas.

Direct outside access to the public zone is through the main courthouse entrance. Direct access from the outside (staff parking, for example) can also be offered to the staff zone through keyed or coded doors. Outside access to the secure zone is usually only by means of a secure vehicular sally port.

### **2.5 USER REQUIREMENTS**

Many of the features required for effective public service are included in the design of the public access to the building. Ease of parking, locating the proper department, and completing the required tasks are the three key components of satisfying the public. Staff within the courthouse need a similar level of daily satisfaction with the functionality of their workspace. Taken together, these features constitute the user requirements of the courthouse.

#### **2.5.1 Public Accessibility**

As already discussed in the previous section, external access to the courthouse by vehicle and by foot should be as easy and un-congested as possible. Inside the building, public access should be limited to public areas of the building. The main public area is the lobby of the building, which leads to stairs, elevators, and possibly a public waiting area. This area should offer comfortable waiting with chairs, water fountains, restrooms, and all other amenities. If kiosks are used for public retrieval of forms or information, the kiosks should be located in the main lobby of the building or other similar public area. The lobby is also a good location for an Automatic Teller Machine (ATM).

Each department within the courthouse should have an appropriately sized public waiting area. Any departmental public windows should open onto this area. If paperwork is filled out in the public area, counters or tables should be provided. Computer terminals or kiosks can offer visitors the opportunity to serve their own needs, with or without a fee. For some departments, private interview/meeting rooms should be offered. These rooms should have insulated walls for privacy, doors, and no outside windows.

All public service areas should be clearly marked by signs on the walls, a marquee in the lobby and elevator areas, and on departmental doors or entrances. Areas where the public is not allowed should also be clearly marked as no admittance areas.



### **2.5.2 Support Services**

Support Services staff typically serve both the Courts and the public. In order to function efficiently, the courthouse must be designed to facilitate interaction with both user groups. Visitors to the court often need nothing more than to submit a form, check on the status of a court case, or make a payment for a traffic violation or child support. Much of this interaction can be handled through service windows in the appropriate agency. In jurisdictions with highly developed case management systems, computer terminals or kiosks can reduce the number of visitors requiring assistance at a window.

Public service windows should be easy to locate within the courthouse. They should offer counter space and attached pens if forms will be completed at the window. The number of windows should be determined by the estimated number of information requests and the length of time to process each request, so that the public is not waiting inordinate amounts of time at windows. In areas of high demand, a number system can be used to prioritize visitors and to reduce standing in line.

Easy access from the support services area to the courtrooms should be included in the building design. Support staff should be linked technologically to any relevant networks within the building. A counter or other system should be in place to make the transfer of files and documents from the judge or attorneys to the clerical staff and to provide a standing work area for last-minute notes or small changes to be made in paperwork.

## **2.6 SECURITY**

Courthouse planning and design should enhance the safety and security of the building, as well as all of the people who work there or visit the facility.

The issue of safety and security within the courthouse has grown to one of importance during the past 20-30 years, and as courthouses have been transformed from general governmental centers to buildings dedicated to courts, many courts have taken the opportunity to increase security within and around the facility. Judges and employees need to feel safe if they are to conduct themselves in a fair and impartial manner and in accordance with a sense of judicial decorum. Security, however, should remain unobtrusive. In an open society that guards its freedoms, the use of overt security measures evokes an image of justice being held hostage.

Courthouse design needs to promote a secure environment without seeming to do so. Security is charged with protecting all those who use the facility, protecting the courthouse facility itself, preventing escape of persons in custody, maintaining a sense of judicial decorum, and protecting court records and documents.

Effective court security is achieved in three ways: with architectural design, with the right communication equipment and technology, and with security personnel and procedures. Minimizing threats of armed violence requires controlled courthouse access. Walk-through metal detectors and x-ray devices at the courthouse entrance are necessary to prohibit the introduction of weapons into the courthouse. The number of public entrances should be limited, preferably to one, and lobbies should be sized and configured to permit appropriate queuing through security checkpoints without making people wait outside.

Separating courthouse participants from unintended or inadvertent contact is a basic prerequisite in modern courthouse design and has as much to do with the integrity and decorum of the judicial process as it does with personal safety. Separate circulation minimizes unintended contact outside the courtroom among judges, jurors, trial participants, defendants in custody, and others.



Architectural elements include a single point of entry for the public; separation of public, judicial staff, and prisoner circulation systems, use of central and court floor prisoner holding; installation of weapons screening checkpoints at all public entrances; and elimination of blind areas and dead ends within the building or places where people can hide. Other elements include appropriate exterior lighting, especially near parking areas and building entrances, emergency lighting and generator back-up.

Planning also needs to include a number of common security systems, including walk through metal detectors, x-ray machines, duress alarms, video surveillance, access control systems, intrusion monitoring systems, smoke detectors and fire alarms.

### **2.6.1 Entrance Screening**

Weapons screening has become a standard practice in nearly all large urban courthouses and even in many smaller, or rural, facilities. It is recommended that all new courthouses be planned and designed with this capability even if a weapons screening system is not to be installed immediately. There should be a single public entrance to the building through which all persons (possibly including staff and judges) should pass. The weapons screening station requires electrical power for the installation of a metal detector and an x-ray machine. In large urban facilities planning should include space for more than one screening station, depending upon the number of persons entering the building at peak times. At other times, one or more of the entry screening stations may be shut down to permit security staff to perform other duties. Sufficient space should be allowed to permit people to line up within the building prior to walking through the screening station. People should not have to wait outside in cold, hot, or rainy weather. Space needs to be provided for two security officers per screening station (one to operate the x-ray machine and another to hand check persons who set off the metal detector). Gun or property lockers may be located at the weapons screening station for storing hand guns or personal items not permitted into the building.



Weapons Screening System - Arlington, Virginia Courthouse

### **2.6.2 Alarm Systems**

There are a number of different types of alarm systems. The most common are duress alarms which are usually located at the judge's bench, clerk's stations, judge's chamber, clerks' public counters or cashier stations, probation caseworkers' offices, and friend of the court's offices. The alarm, when pressed, should signal a central security station that coordinates a response. The most common type of duress alarms are hard wired systems with fixed positions. Newer systems are wireless and may be triggered by a device that is carried by judges and court employees. The signal is picked up by a receiving stations located throughout the building and passed on to the central security control.

### **2.6.3 Intrusion Sensors**

Intrusion systems monitor the status of doors, windows, and other exterior openings. They can be coordinated with an access control system to alert unauthorized or forced access of doors, glass breakage, or roof intrusion. Other devices that might be used include motion detectors that would indicate unauthorized access. Other areas that might need protection include files storage, vault storage or safes,



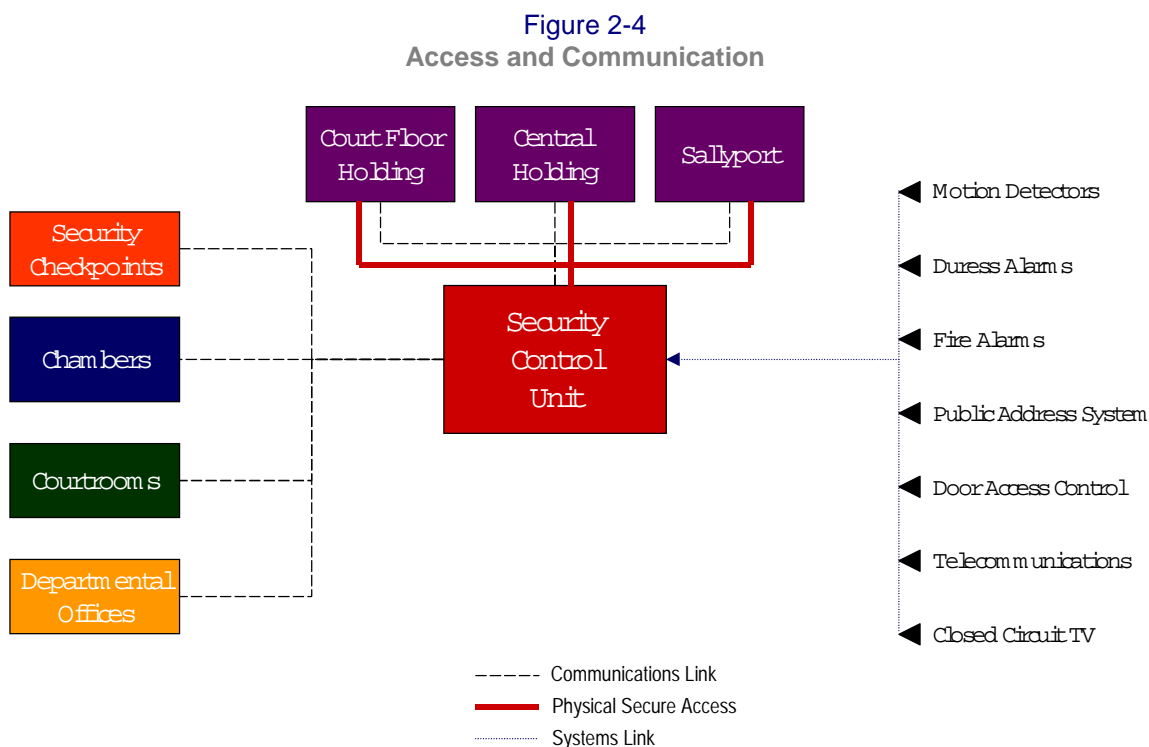
and computer and telecommunications rooms. All such systems need to be able to identify the location of the intrusion.

#### 2.6.4 Fire Detection

Fire detection systems monitor smoke detectors, sprinkler flow, and heat. They report to a central fire command station in the building, usually located at or near the central security station. Reference should be made to the National Fire Alarm Code NFPA 72, which sets minimum requirements for fire alarm systems. Further information on fire protection codes can be found at the National Fire Protection Association website: [www.nfpa.org/](http://www.nfpa.org/).

#### 2.6.5 Access Control

Access control systems control entry to restricted areas of the building. Typically activated by numeric keypad or card readers, access control systems allow door release to the private circulation systems and other secure areas of the building. Their advantage is that if the card is lost the codes can be easily changed. Figure 2-4 illustrates how security and communication interface through the combination of physical links and controls, communications and technology.



#### 2.6.6 Video Surveillance

Video monitors can supplement, or replace, security staff in public and secure areas. Typically video cameras are used in prisoner holding areas to monitor prisoners and prisoner movement. They may also be located to observe entrances to the building, particularly loading docks and service entrances that may



not have a permanent security presence, and they are used to monitor public and private corridors as well as entrances to sensitive areas.

If the court makes use of video recording cameras to take the court record, these cameras can also be used by security staff to supplement responses to duress alarms. If video recording is not being used in courtroom, consideration should be given to installing security video cameras in courtrooms that would activate when the duress alarm is triggered.

### **2.6.7 Secure Circulation**

Secure circulation through separate elevators, or stair wells, should be provided from a private parking area for judges, along with private entrances to the limited-access circulation corridors of the individual court or chamber floors. General court floor security might be maintained through a bailiff station in the public area, with access to the private or staff corridor restricted through a card access system. Access to private circulation corridors housing judges' chambers, judicial staff, and jury deliberation rooms, also may be regulated by video camera and intercom systems or a receptionist.

### **2.6.8 Public Address**

Larger courthouses should have a public address system that can be used by building security to make announcements and provide instructions to everyone in the building. It may also be used to announce changes in courtroom assignments, the beginning of hearings and trials, and to make other announcements of a general interest.

### **2.6.9 General Security Measures**

Good sight lines in the courtroom are vital to effective control; bullet-resistant materials should be provided for the judge's bench; and duress alarms (linked to a closed-circuit television system) are essential for rapid emergency response. Additional measures should be taken to secure money received and kept in the courthouse. Considerations include theft-prevention in the fine/fee payment areas. Payment should only be received in an enclosed and protected setting. Bank-type cashier windows with security glazing and duress alarms should be placed wherever significant money transactions take place, and accounting/deposit practices should minimize the opportunity for theft.

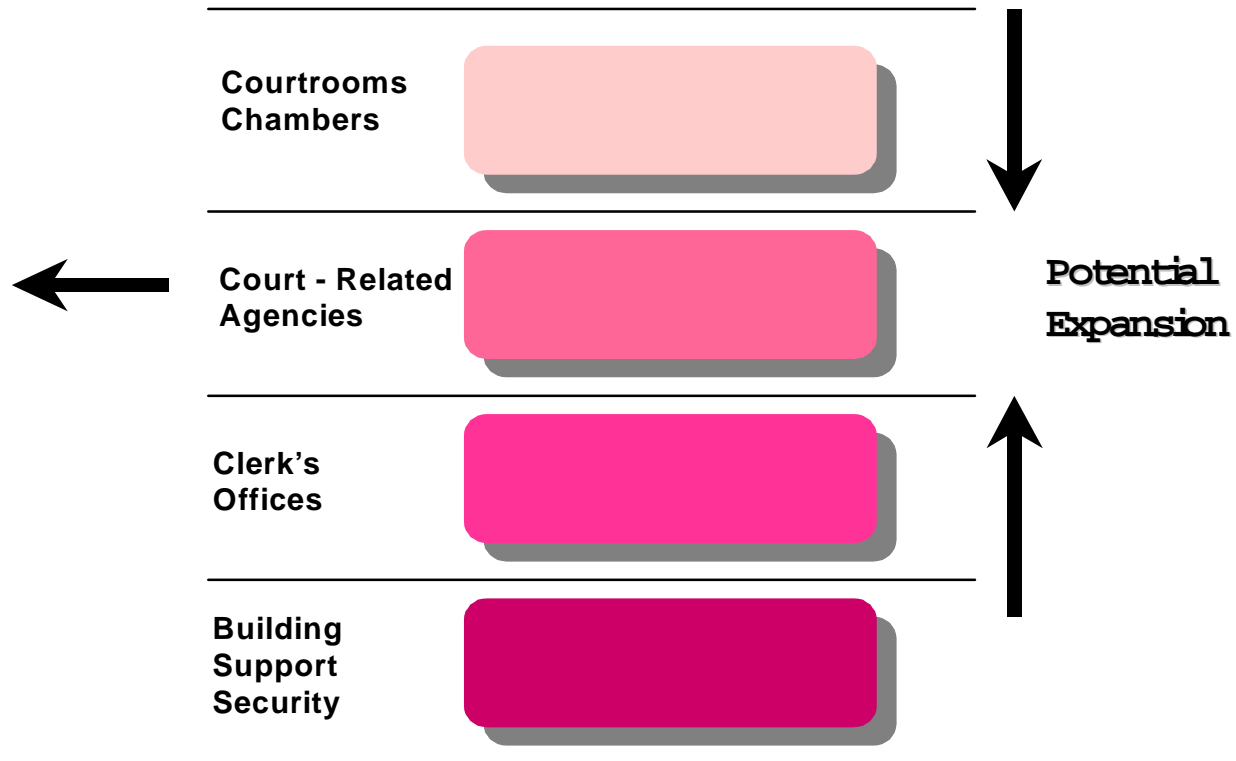
## **2.7 GROWTH MANAGEMENT - PLANNING FOR FLEXIBILITY AND GROWTH**

Courthouses, and indeed all public facilities, have undergone tremendous physical changes over the past 20 years as a result of automation and communications technology that has altered how courts conduct their business. It is expected that the next 20 years will see similar, if not greater, changes affecting all aspects of court operations, building systems, and building construction techniques. Change has not been limited to technology and daily work processes. Michigan courts have experienced changes in jurisdiction and organization in recent years, and expectations are that more changes will be evident in the future as the Courts experiment with different organizational structures, work processes, and technologies.

The effect of such changes is that buildings need to adapt to future changes in operations, organizational structure, technology and communication requirements, and growth. In response to these changing environments, new courthouses need to be designed with greater flexibility and the ability to grow and change over the years.



Figure 2-5  
Future Expansion Options



While a good forecasting process and thorough analysis of potential operating policies can help to anticipate future changes and assist with identifying growth or changes strategies, not all policy or procedural changes can be anticipated. Several strategies, however, can prolong the operational life of the facility.

Floor-to-floor heights and bay sizes (the distance between support columns) should be standardized throughout the building to permit the future conversion of non-courtroom space to future courtrooms. Also, functions can be located to provide for future internal expansion. Court functions can expand by removing general, or court related functions, such as the prosecutor or public defender. One strategy is to locate low-to-medium volume office functions on middle floors of the courthouse; then as these offices outgrow their space they can be removed to adjacent buildings, allowing court functions to expand upward from the high-volume public floors and downward from the trial courtroom floors.

Specialization reduces future flexibility. Where growth is a concern, courtroom specialization should be minimized in order to maximize future flexibility. Courtrooms that are sized and equipped to support a broad range of activities provide extra insurance for long-term usefulness regardless of unexpected growth or jurisdictional changes and means that the useful life of the facility can be extended. For this reason, planners should consider making all new courtrooms of a size large enough to accommodate activities that demand the most space, such as criminal jury trials.



Other ideas to enhance future flexibility include the use of building structural systems and core designs that are flexible and adaptable to multiple future uses and needs. Every space should be designed with an alternative future use in mind. For example, conference rooms should be of a size that permit them to be easily converted to standard sized offices. Another strategy might be to make all enclosed spaces (supply closets or storage rooms) large enough that they also can be converted to office space in the future as staff is added. It also means making sure that all spaces are equipped with sufficient electrical, data, and voice lines.

Even building support spaces need to be designed to enhance flexibility. Building lobbies, restrooms, electrical closets, telecommunication closets, and other utility/service areas should be positioned every 10,000 to 20,000 square feet in order to support easy expansion of services. Telecommunication, fire protection, and security equipment closets should be co-located (located directly adjacent to each other) on each floor, simplifying physical connection requirements and allowing simpler future connectivity. In addition, modular utility areas should be "stacked" or located directly above each other from one floor to another. This will not only simplify initial construction and help lower construction costs, it will greatly simplify future changes.

Core-to-glass dimensions of the building (the distance from the building core to the exterior wall) should be developed to support the respective needs of the courts and court floors, office areas, and specialized use areas. Core-to-glass dimensions should be planned to accommodate both the current and any future needs of single groups or departments. Similarly, interiors should be designed to accommodate both initial occupants and a wide range of potential future occupants.

Avoiding premature obsolescence should be a key goal of any court's project. HVAC, electrical and other building systems should be planned to handle future growth. Interior layouts should be designed with "universal grids" that incorporate power/voice/data distribution for current as well as future needs — with easy access and changeable with minimal disruption to ongoing activities.

Courthouses designed for specialized court functions are generally not as adaptable as courthouses designed for more general purposes. But, there is often a cost trade off. For example, a courthouse with large, generic courtrooms capable of handling all types of hearings and trials is much more flexible than a courthouse designed with specialized courtrooms of different sizes and designed for very specific purposes (juvenile, probate, criminal, and civil). Generally, space savings in using specialized courtrooms translate into immediate savings in construction costs. However, the drawback is that different divisions of the court may grow at different rates, and the court may end up trying to conduct criminal jury trials in courtrooms that were never designed for that purpose.

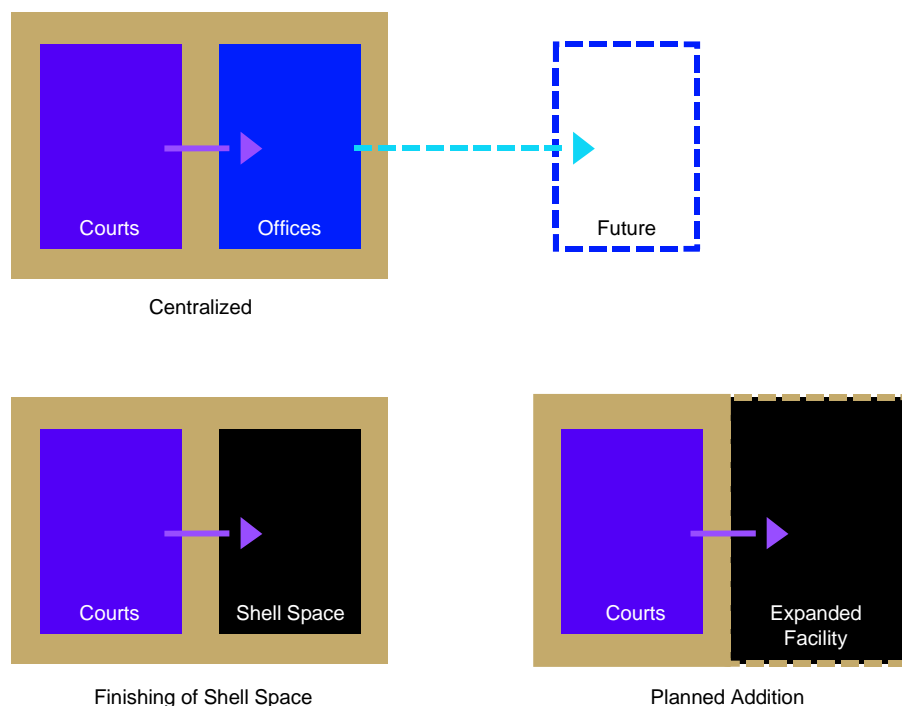
Finally, jurisdictions may wish to assess carefully the ratio of (1) judges to courtrooms, (2) jury deliberation rooms to courtrooms, and (3) holding areas to courtrooms. Some jurisdictions with highly centralized and carefully controlled calendaring and scheduling can operate with more judges than courtrooms, but jurisdictions that are experiencing high growth rates may face potential operating drawbacks in such a situation. Careful consideration of actual operating practices should precede any reduction in the usual one-to-one ratio. One long-term strategy for extending the life of the courthouse is to design the facility so that it will eventually accommodate more judges than courtrooms. At the time of occupancy and for the first phase of the facilities' life, it is anticipated that there would be one courtroom per judge. As the court continues to grow, there would be an expectation that judges could be added without adding more courtrooms and that judges could share courtrooms. This can only be done in larger facilities (perhaps with more than ten judges.) To make this transition easier, court floors should be designed with chambers slightly separated from the courtrooms, and additional conference spaces might be provided that can also be used for small hearings even non-jury trials.



Other strategies for handling growth are the use of space that is just a shell, future construction of additional space, and expansion into adjacent space. Many courts have made use of shell space to accommodate immediate growth needs. One or more courtroom may be constructed but not fitted out immediately. When future judges are added, the space is finished. Meanwhile, this shell space may be used for storage or other purposes, depending upon the anticipated time until it is needed. The advantage is that the new courts will be integrated into the overall building circulation and support systems. The Funding Unit can save some money by not having to outfit the courtrooms immediately and may gain some functional space that can be used for something else. The drawback, of course, is that it still adds to the construction costs by increasing the amount of space that needs to be built. Communities may want to consider this option only when it is anticipated that the shell space will be needed within a short time such as 5-10 years.

Where future occupancy is not expected until at least 10 years, a better strategy may be to design the facility for easy expansion. This can be done in two ways. The first is to construct court support spaces within the building with the proper spans and floor to ceiling heights so that they can be converted to future courtrooms. When new courtrooms are needed, additional office type space can be constructed to house the support functions, and the vacated space can be fitted out as courtrooms. The other way is to design the initial construction with a logical location for expansion, usually at one end of the building, where new courts can be constructed and tap into existing public, private, and prisoner circulation systems.

Figure 2-6  
Provision for Future Horizontal Expansion



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## **2.8 COURT TECHNOLOGY AND IMPLICATIONS FOR COURTROOM DESIGN**

Court technology impacts court design on three primary levels. First, is in the implications that technology has on the planning of the building infrastructure. The second is in the court support and public areas where integrated case management systems have changed the way case data is filed and processed. The third is in the design of the courtroom itself, where technological innovations are increasingly prevalent. The ways in which all levels of technology impact the design of court buildings will be discussed in this section.

### **2.8.1 Building Infrastructure**

The technological infrastructure of a new court building should offer a compromise between state-of-the-art capability and future flexibility. All rigid conduit or cable placements should be planned with the assistance of system maintenance staff to ensure the most efficient design. At the same time, the infrastructure provided when a new building is constructed should take into account the rapid obsolescence of current state-of-the-art technology. Systems should be capable of handling upgrades to levels barely perceptible on the horizon at the time of building design. Currently, cable connections are the most common means of linking systems and transferring data. Despite our current dependence on cables, wireless connection is already technologically possible and is likely to become the next state-of-the-art for communication systems. Assuming the inevitability of this change permits planning of new courthouses to incorporate flexibility that will better accommodate the next phase of technological development.

#### *2.8.1.1 Computer Systems*

Each new courthouse design should include the appropriate computer network rooms. These rooms should be large enough to permit generous air circulation (no smaller than 200 SF regardless of amount of equipment) around the maximum amount of equipment that would be housed when the building is fully occupied. Each room should be equipped with an independent thermostat and environmental control system and light fixtures with a low heat output. If the building is a mid or high-rise, vertical stacking of computer rooms makes computer maintenance and wiring more simple. Easy access to cabling in ceiling or floor crawl spaces and vertical access between floors should be provided through these rooms. In the case of a court building with a large footprint, construction of two network rooms per floor can minimize the length of cable required to reach the outer corner offices.

Direct network connections should be available to all work areas throughout the building, including the courtrooms. The actual network connections will depend on the functional purpose of the staff housed in each area, but the conduit for easy cable connections should be part of the building design. Conduit and/or cabling should be provided under the floor of courtrooms with appropriately placed outlets, phone jacks, and network connections flush-mounted under concealed covers. Raised access flooring should be considered for all computer rooms, the clerk's offices, and some areas of the courtrooms.

The location of the computer network room and all computer cabling should be included in the electrical layout of the building and should be readily available to all network maintenance staff.

#### *2.8.1.2 Telephone/Data*

All non-public areas of the building should be equipped with the jacks and/or connections required for connection to direct telephone lines or to a central switchboard. A variety of cable options are available with varying costs and information transfer capabilities. If the cables selected do not permit simultaneous data and telephone exchange, designated data lines should also be provided in all work areas. Location of jacks should permit flexibility of workstation placement while minimizing use of extension cords.



## **2.9 COMMON AREAS**

### **2.9.1 Lobby**

With computerized records becoming more prevalent, direct public access to limited file information can be permitted through terminals at public desks, through kiosks in public areas of the Court (or other facility), or even through the Internet. In designing future courts, appropriate space and cabling capabilities should be planned to permit terminals or kiosks and printers in public waiting areas. Workstations should be designed to permit private viewing and printing of case-related materials. If Internet access is permitted, multiple public access stations should be located in each courthouse to facilitate public use. The lobby should also include information kiosks and public telephones.

### **2.9.2 Court Support Areas**

Court support staff are responsible for maintaining the records of court activity, providing copies of records to the public, and, in some cases, accepting fees or payments. In some areas, these staff also have the responsibility of scheduling cases, preparing materials for the judge prior to court, and notifying defendants of their scheduled appearances. Information is increasingly maintained through computerized case management systems, and growth in the use of computers to store detailed case information has changed the way clerks schedule the court calendar, the way case information is received and stored, and the way it is disseminated to other court offices and the public.

### **2.9.3 Workspaces**

Within the court support work areas and other tenant areas, spaces should be designed to accommodate the use of technological equipment. Space standards should assume that all court support employees have a Personal Computer (PC) at their workspaces. This standard should include the appropriate space for keyboard trays to pull in and out, outlets for electricity, modems, and network links, in addition to the space for the traditional desk, chair, and any personal files. Workspaces can be wired through cables under the floor with permanent outlets at designated points for each workstation. In cases where greater flexibility is desired, cables can be run on a grid or other planned pattern, and future workstations can be connected through outlets added as needed. As already mentioned, it is likely that cable connections for computer networks will become obsolete over the coming years as wireless connections become more cost-effective and reliable. When this occurs, the need for careful planning of cable location will be eliminated; however, at the current stage of technological prevalence, cabling is still the most frequently used and inexpensive method of data transfer.

Where shared equipment is used (printers, copiers, or other equipment) consideration should be given to the distance from each workstation to the equipment, to the heat and noise generated by the equipment, and to the storage of supplies needed to maintain the equipment. Particularly noisy or otherwise distracting equipment should be separated from work areas by noise-obstructing walls or other sound barrier.

### **2.9.4 Conference/Meeting Rooms**

All conference or meeting rooms should have the same data and telephone connections found at staff workstations. Two-way speakers can be included for conference calls, and additional electrical outlets should be provided in walls and floor to provide flexibility of room arrangement for different purposes and



use of different equipment. Projection screens can be built into these rooms, or portable screens can be used.

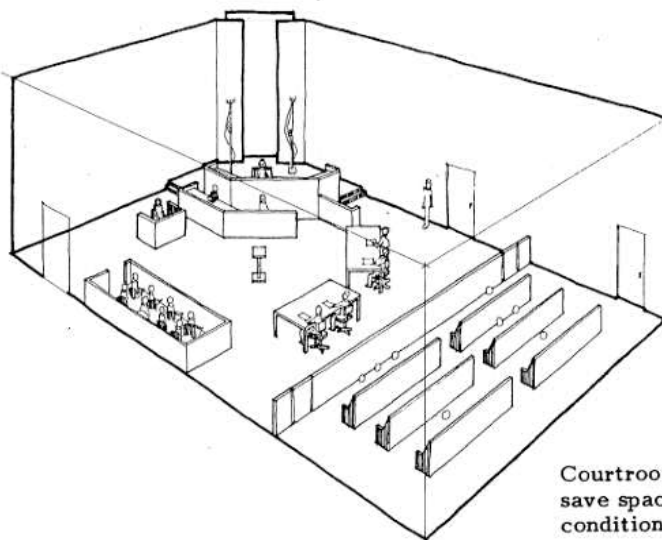
At least one lockable equipment closet should open onto each conference/meeting room. This closet should have appropriately designed shelves to hold VCR's, overhead projectors, or other equipment. The closet should have enough floor space to store a rolling cart and a ladder for reaching heavy equipment on top shelves.

### **2.9.5 Courtroom**

The Courtroom is typically a dignified room, with a sense of the awe and power embodied by the law. The increased use of various technology—video evidence and testimony, computers at the bench and recorder's desk, and even telephones at the counsel tables—have in some ways diminished the dignity of the court. Computer monitors and bulky recording instruments crowd open desktops. Televisions and video equipment often sit on metal carts reminiscent of elementary school, which can be rolled from place to place within the courtroom. Cords trail across the floor in bundles, covered by carpets or protective plastic guards. Technological innovations have greatly improved the court process, and modern courtroom design should reflect the permanence of some of these developments by incorporating them into a more austere and uncluttered design.

Figures 2-7 through 2-9 represents three commonly used courtroom layouts: corner, traditional, and circular.

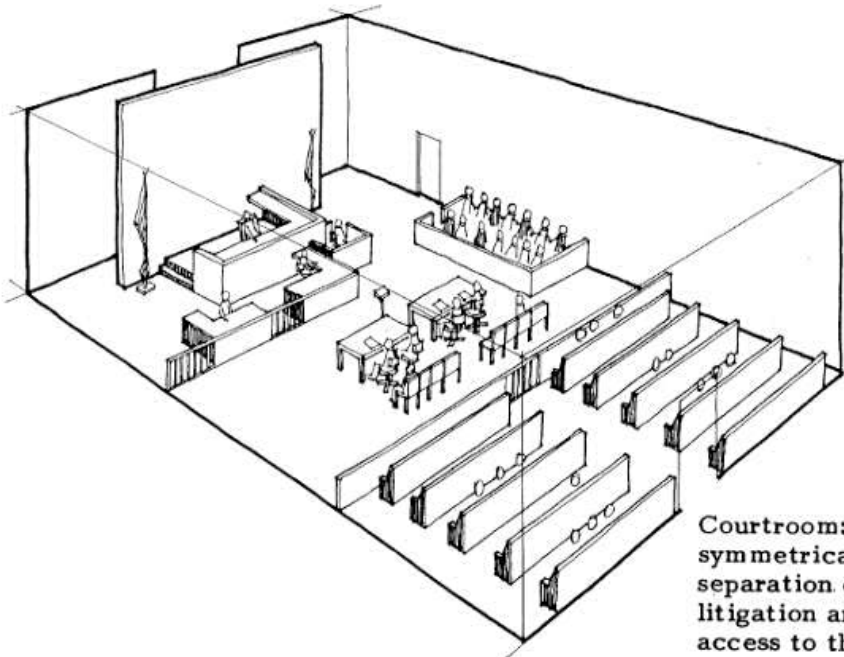
**Figure 2-7**  
**Corner Courtroom Diagram**



**Courtroom: a corner orientation may save space and provide good acoustical conditions and sightlines.**

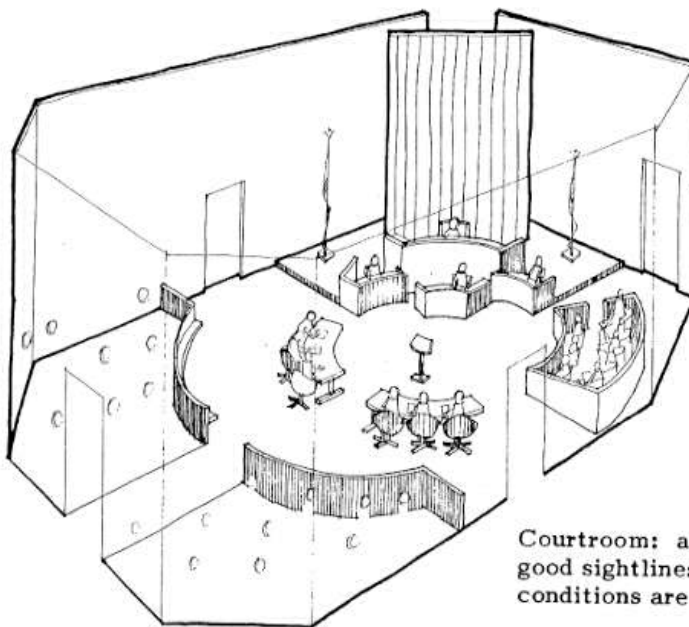


Figure 2-8  
Traditional Courtroom Diagram



Courtroom: the traditional symmetrical arrangement. Note separation of spectators from the litigation arena, and separate public access to the courtroom.

Figure 2-9  
Circular Courtroom Diagram



Courtroom: a circular arrangement often has good sightlines, but satisfactory acoustical conditions are difficult to obtain.

There are six primary areas of the courtroom where technology will have an influence on design. These include the bench, the counsel tables, the jury box, the witness stand, and the clerk/reporter and bailiff



stations. In addition, there are technological requirements for the overall courtroom design that should be taken into account.

## **2.10 OVERALL DESIGN CONSIDERATIONS**

### **2.10.1 Video Evidence**

If a flat computer/television screen is permanently mounted in the wall of the courtroom, it should be placed between the jury and the judge with a movable panel/cover, so that the judge can effectively block or permit the jury (and public) to view the contents. If individual monitors are used, they should be connected to each position in the jury box, as well as at counsel tables and at the bench. Activation of these monitors should be handled by the judge at the bench.

Input devices for these monitors or screens can be through a personal computer, a video cassette player, a digital videodisc (DVD), or a CD-ROM. Each of these input devices should be available and permanently connected to the projection equipment with simple switches identifying the correct input source for ease of use by those unfamiliar with the system. All input devices should be located in a visibly unobtrusive location inaccessible to the public but easily accessed by attorneys.

In cases where a traditional projection screen is needed, a permanent screen can be mounted in the ceiling of the courtroom, or a portable screen can be used. A movable podium or projector stand can be used to hold slide or projection equipment, or a permanent projector can be mounted in a movable trap in the ceiling and connected when needed.

### **2.10.2 Video Appearance**

Video conferencing is used with increasing frequency for arraignments, motions, and even pretrial hearings with detained defendants. The defendant at the jail appears by video/audio link on a monitor in the courtroom, and the judge appears on a similar monitor in the room with the defendant. Papers transmitted during these actions are sent by facsimile, sometimes with the original following by courier or mail. Because of the prevalence of use of video conferencing in the State of Michigan, it is recommended that all new courts be designed with permanent video conferencing equipment built into the design of the court.

In some cases, the monitor can be the same as one used for video evidence. In other cases, the placement or data link will require a designated monitor for video conferencing. This monitor should be a flat screen or built-in monitor with camouflaged or other discreet cover that can be removed when the monitor will be used. The ideal location for this monitor is within easy view of the judge from the bench and the reporter from his/her station, perhaps in the wall opposite the jury box. All input cables and other equipment should be contained in an equipment closet or compartment built into the wall beside or below the monitor. Audio and visual controls should be located at the bench and at the monitor location to permit muting of sound or blocking visual images when appropriate.

An alternative to providing permanent video equipment in a full-sized courtroom is to use a smaller room (a conference room or magistrate's hearing room) with a "bench" and appropriate decorations that will appear on video to be a full courtroom. This "movie-set" approach to video appearances permits the full-sized courtroom to be used for other activity while video appearances are taking place in a smaller, designated space.



### **2.10.3 Sound Amplification**

Sound amplification devices should be included at counsel tables, the bench, reporter's desk, and witness stand for all large courtrooms, where increased distances or large public galleries contribute to background noise. These systems can be portable or can be built into the tables. Either is appropriate, provided the system is discreet, not space-intensive, and produces the desired amplification.

### **2.10.4 Audio Evidence**

Input connections should be provided linking a standard cassette player, CD-ROM player, or computerized recording device with the sound amplification system in the courtroom to facilitate hearing audio evidence at the bench, the jury box, the witness stand, and counsel tables. Speakers or amplification output devices should be as small as possible without distorting the sound and should be discreetly mounted out of sight in tables, desks, or other furniture if possible. Recording devices should be connected to permit evidence presented in audio format to be recorded.

### **2.10.5 Lighting**

Lighting within the courtroom needs to be bright enough to easily see and read materials. Incandescent or other soft lighting is recommended over fluorescent lights. Several levels of lighting should be offered including full light throughout the courtroom, lowered lighting for viewing of overhead slides and other projected materials, dim lighting for viewing poor quality or special types (LCD) of projected materials, and a dark option for times when the courtroom is not in use.

Task lighting should be provided in several areas of the courtroom for counsel tables, the bench, the reporter/clerk's station, the bailiff's station, and the jury box. Details of this lighting will be discussed below. Also provide task lighting in the area where equipment hookups are handled. All task lighting should be independently controlled and designed to minimize glare. Carefully chosen desk lamps, light fixtures with shades or covers, or recessed canister light fixtures can be used for task lighting.

### **2.10.6 Temperature Controls**

The courtroom should be maintained at a comfortable temperature throughout long proceedings, regardless of the number of people present. To accomplish this goal, it may be necessary to establish several climate zones within the courtroom, such as the bench, the jury box, and the gallery. Actual zones will depend on the size and function of each courtroom.

Thermostat controls should be inaccessible to the public. Recommended placement is within easy reach of the judge in the bench area so that adjustments can be made without distracting the proceedings. Computerized or wireless controls can be programmed ahead of time, could be connected to the courtroom network accessible through the judge's personal computer, or could be controlled through a wireless (remote) device. The heating/cooling system should be sufficiently responsive to eliminate the need for portable heating/cooling devices which can create circuit overloads and other hazards.



### **2.10.7 Bench**

The bench is the focal point of the courtroom. This should be taken into account when selecting the placement of computer monitors, projection screens, and other distracting equipment. A personal computer should be included in the design of the bench along with a distress signal, telephone, sound amplification devices, light and other equipment controls, and space for paper materials on the desk's surface. The bench should be designed so that this equipment is not visible, or is barely visible, from the gallery of the courtroom. Cords should be connected directly to flush-mounted floor outlets, and use of extension cords should be minimized.

Task lighting should be built into the bench. This lighting should operate independently of the other room lights with controls at the bench and should be mounted to focus light on the judge's desktop without producing a distracting glare in the gallery. Light needs to be bright enough for reading but focused enough to not interfere with clarity of projected materials in an otherwise dark room.

It is recommended that the judiciary be consulted on the design of the bench, but at the same time, the bench should not be judge-specific. The desktop may be designed to accommodate either an upright monitor on the surface or a monitor under the desktop, for example, to suit a judge with either preference.

### **2.10.8 Litigant / Counsel Tables**

Litigant / Counsel tables should be equipped with telephone and data lines as well as power outlets. If a county or state computer network is used by defense or prosecutors, an appropriate network connection should also be provided. Provide task lighting with controls at the table, either on the table or in the ceiling above the table. Flush-mount all outlets in the floor under the counsel table to minimize the use of extension cords. Cords should be concealed in table legs or behind modesty panels.

### **2.10.9 Jury Box**

It is crucial that the jury be able to see and hear all testimony, see all evidence, and be able to hear instructions from the judge. Much of this communication is facilitated through the placement of the jury box within the courtroom; however, depending on the placement of screens and monitors, technology may influence the equipment needed in the jury box.

### **2.10.10 Witness Stand**

The chief responsibility of the witness is to respond to questions presented by the defense, the prosecution, or the judge. As a result, the witness stand does not require a great deal of equipment. The witness stand should provide task lighting, sound amplification, and a small surface for papers or other materials. Controls for the task lighting should be located at the bench.

### **2.10.11 Clerk/Reporter Station**

This station is one of the most equipment-intensive in the courtroom but is also one of the most subtle. This station must house a personal computer, a video projection device (if the PC is not used for this purpose), a sound amplification device with speaker or headset, and dictation or recording devices. The station should be equipped with phone and data lines as well as adequate electrical outlets.



### **2.10.12 Bailiff Station**

Defining the responsibilities of the courtroom security officer is critical to determining the design factors. If the bailiff is primarily a “courtroom aide” to signal the entry of the judge and maintain spectator control, a limited workstation is required. However, if the bailiff is actually the security presence in the courtroom, the location should provide a panoramic view of the space, communication capability to security support, and a direct control of the prisoner entry. In some jurisdictions, the courtroom will include both a bailiff and security position. In addition to a 12 – 25 square foot area in the courtroom, a pooled or individual workspace of 40 – 50 square feet per bailiff should be provided in the judicial set.

## **2.11 CONCLUSION**

As a jurisdiction is beginning the planning process, the Project Advisory Committee should address the general design issues discussed in Section 2. Understanding the questions to ask of the design experts is a critical first step towards a successful project.